

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE March 13, 2012	WATER RIGHT NUMBER G4-33055
MAILING ADDRESS YAKAMA NATION PO BOX 151 TOPPENISH WA 98948-0151	SITE ADDRESS (IF DIFFERENT)

Quantity Authorized for Withdrawal or Diversion		
WITHDRAWAL OR DIVERSION RATE 400	UNITS GPM	ANNUAL QUANTITY (AC-FT/YR) 645 (non-additive)

Purpose						
PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AC-FT/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Fish propagation	400	0	GPM	0	645	01/01 - 12/31
IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION				
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID		CONNECTIONS		
0	0					

Source Location								
COUNTY	WATERBODY	TRIBUTARY TO				WATER RESOURCE INVENTORY AREA		
BENTON	GROUNDWATER					37-LOWER YAKIMA		
SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Well 1	136944008888888		09N	24E	36	SW SE	46.21534	-119.75807
Well 2	136943000009000		09N	24E	36	SE SW	46.21482	-119.75932
Well 3	136943000009000	AGC417	09N	24E	36	SE SW	46.21477	-119.76025
Datum: NAD83								

Place of Use (See Attached Map)	
PARCELS (NOT LISTED FOR SERVICE AREAS) 136943000009000, 136944008888888	
LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE Located within the SE ¹ / ₄ SE ¹ / ₄ SW ¹ / ₄ and SW ¹ / ₄ SW ¹ / ₄ SE ¹ / ₄ of Section 36, T. 9 N., R. 24 E.W.M., Benton County.	

Proposed Works
Water is to be used for anadromous fish propagation and acclimation at the Prosser facility consistent with salmonid restoration goals for stocks extirpated by Columbia River dams and hydroelectric projects. Water is pumped from three existing wells located on the property to supply water for egg incubation, juvenile rearing and acclimation in the amount of 3,200 afy. This authorization provides no additional annual quantity, but allows for additional withdrawal rate to augment water withdrawn under G4-34946. Water is discharged to the Yakima River under NPDES permit # WAG 135 017. Water is discharged at a location slightly upstream of the wells.

Development Schedule		
BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE

Started	Completed	November 19, 2014
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Measurement of Water Use

How often must water use be measured?	Weekly
How often must water use data be reported to Ecology?	Annually (Jan 31)
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Withdrawal (gpm or cfs)

Provisions

Wells, Well Logs and Well Construction Standards

All wells constructed in the state shall meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard shall be decommissioned.

All wells shall be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag shall remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.

Measurements, Monitoring, Metering and Reporting

An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173.

Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Central Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Central Regional Office for forms to submit your water use data.

WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Water Use Efficiency

The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

Proof of Appropriation

The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the permit. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Findings of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. G4-33055, subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW Ste 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Signed at Yakima, Washington, this _____ day of _____ 2012.

Mark Kemner, LHG, Section Manager

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.

INVESTIGATOR'S REPORT

Application for Water Right – Confederated Tribes and Bands of the Yakama Nation

Water Right Control Number G4-33055

Trevor Hutton, Department of Ecology

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number G4-33055. On 3/13/2012, the Confederated Tribes and Bands of the Yakama Nation applied to use water in the amount of 400 gallons per minute (gpm) for the purpose of fish propagation and acclimated related to the operation of the Prosser Hatchery Facility. Attributes of the application are contained in Table 1, below.

Priority Processing

This application is being priority processed because it qualified under the criteria under which an application may be processed prior to competing applications per WAC 173-152-050(2)(c) which allows priority status to be given to applications for proposed water use that is non-consumptive and if approved would substantially enhance or protect the quality of the natural environment.

Table 1 Summary of Requested Water Right

Applicant Name:	Confederated Tribes and Bands of the Yakama Nation
Date of Application:	3/13/2012
Place of Use	SE ¹ / ₄ SW ¹ / ₄ and SW ¹ / ₄ SE ¹ / ₄ of Section 36, T. 9 N., R. 24 E.W.M.

County	Waterbody	Tributary To	WRIA
Benton	Groundwater		37-Lower Yakima

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Fish propagation	400	GPM		01/01	12/31

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Well 1	13694400888888		09N	24E	36	SW SE	46.21534	-119.75807
Well 2	136943000009000		09N	24E	36	SE SW	46.21482	-119.75932
Well 3	136943000009000	AGC417	09N	24E	36	SE SW	46.21477	-119.76025

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum: NAD83.

Legal Requirements for Approval of Appropriation of Water

RCWs 90.03 and 90.44 authorize the appropriation of public water for beneficial use and describe the process for obtaining water rights. Laws governing the water right permitting process are contained in RCW 90.03.250 through 90.03.340 and RCW 90.44.050. In accordance with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for water rights to be approved:

- Water must be available
- There must be no impairment of existing rights
- The water use must be beneficial
- The water use must not be detrimental to the public interest

Public Notice

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted and used. Notice of this application was published in the Prosser Record-Bulletin on May 2, 2012 and May 9, 2012.

Ecology received no comments.

Consultation with the Department of Fish and Wildlife

The Department must give notice to the Department of Fish and Wildlife of applications to divert, withdraw or store water. Notice was given to Steve Boessow from WDFW by email on 10/16/2012. A letter of support was received from WDFW on 10/17/2012 affirming the environmental benefits of the project.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

- (a) It is a surface water right application for more than 1 cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cfs, so long as that irrigation project will not receive public subsidies;
- (b) It is a groundwater right application for more than 2,250 gallons per minute;
- (c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
- (d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
- (e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

As a part of a temporary permit issued for this project, Ecology issued a Determination of Nonsignificance on 8/5/2004. The water use as proposed is non-consumptive and poses little to no risk of harm to the environment. The purpose of the proposal for fish propagation is directly related to restoration of extirpated fish stocks within the Yakima River Basin.

INVESTIGATION

Proposed Use and Basis of Water Demand

Water is to be used for anadromous fish propagation and acclimation at the Prosser facility consistent with salmonid restoration goals for stocks extirpated by Columbia River dams and hydroelectric projects. Water is pumped from three existing wells located on the property to supply water for egg incubation, juvenile rearing and acclimation in the amount of 3,200 afy. A temporary permit (G4-34946T) was issued in 2004 which expired in 2006, however the use continued without an extension to that temporary permit. Another temporary permit (G4-35345T) was issued on April 7, 2011 and is due to expire on December 21st, 2016. This allocation is intended to address the fact that a permanent facility has relied upon temporary water rights and has experienced periods of operating without a valid right to use water. Instantaneous quantities of up to 3,600 gpm are necessary to provide cold water to juvenile rearing ponds in the summer months. While the subject application requests only 400 gpm, water under this authorization is to be used in conjunction with water issued contemporaneously under G4-34946 to supply the total rate of 3,600 gpm. Additionally, annual quantities under this authorization would be non-additive to quantities authorized by G4-34946. Water is discharged to the Yakima River under NPDES permit # WAG 135 017. Water is discharged at a location slightly upstream of the wells.

Other Rights Appurtenant to the Place of Use

Aside from the existing temporary permit, there are two applications for water submitted by the Bonneville Power Administration (BPA) that share a common place of use with the subject application and proposed to use surface water out of the Yakima River and Chandler Canal. One of these rights, application S4-30971, which proposes to divert from the Chandler Canal, states that the applicant is not actually requesting water rights, but serves to notify Ecology of an agreement with the US Bureau of Reclamation (USBR) to serve water to a planned hatchery and acclimation facility. It seems that these documents were seeking water for an earlier iteration of the project prior to the existing facility being put into use. The facility is currently operated by the Yakama Nation under a memorandum of agreement with USBR (1425-00MA103000). As a part of this investigation, the author contacted the BPA to ascertain their interest in the applications. It was noted that they wished to keep them on file until the subject application received final authorization. Follow-up with the BPA is needed to withdraw the applications should this application be processed favorably.

Hydrogeologic Information

As a part of this investigation a licensed Ecology staff Hydrogeologist prepared a stamped technical memorandum. The following excerpts are taken from this memorandum:

The subject wells are located less than 500 feet north of the Yakima River and are completed in unconsolidated sediments. The Chandler Canal, with its diversion from the Yakima River located approximately 0.6 miles west of the hatchery facility, essentially parallels the Yakima River and lies north and upgradient of the subject wells. Well logs on file with Ecology indicate that two of the subject wells appear to be drilled to a depth of 105 feet below ground surface (bgs) and the third to a depth of 115 feet bgs. The unconsolidated sediments are described on two of the logs as gravel intermixed with sands and clays. The third well log is a reconditioning log and no sediment description is provided. A search of the Ecology well log database suggests there are only two additional wells possibly located in the vicinity of the subject wells. One well, under the name of Hobbs, is drilled to a depth of 165 feet. Based on Benton County parcel information this well appears to be located on the property adjacent to and northeast of the hatchery facility. According to the information provided on the well log, the Hobbs well is completed into unconsolidated gravels intermixed with silt and clay. The log also indicates that there appears to be 20 feet of "sandstone" encountered in the bottom of the well between 145 and 165 feet bgs. Another well, under the name of Ramirez, could not be located based on the parcel information provided on the well log. In addition, the description of the material encountered during drilling, basalt and clay, suggests that this well is not located in the same area as the subject wells. All five wells are listed in Table 1 below along with some of their attributes.

Table 1

Name of Record	Hole Depth (ft.)	Well Diameter (inches)	SWL (ft.)	SWL Date
Yakama Nation	105	6	12.0	2/26/2005
Yakama Nation	115	16	8.0	4/30/1997
Yakama Nation	105	16	10.0	4/4/2005
Hobbs, J.	165	6	31.0	9/28/2007
Ramirez, A. G.	110	6	26.0	3/26/2007

SWL – Static Water Level

Surficial geologic mapping of the area indicates that the unconsolidated sediments in the area of the subject wells are comprised of recently deposited alluvium and flood-deposited sands and silts associated with glacial Lake Missoula (WDNR, 2012). Geologic structures such as faults and folds, can in some cases, restrict groundwater flow and thus limit the interaction between surface water and groundwater. However, surficial geologic maps of the area in which the wells are located show no such geologic structures between the wells and the Yakima River (WDNR, 2012). As noted in Table 1 the static water levels (SWL) in the wells are relatively shallow. These shallow water levels represent the top of the water table. Given that water levels within an unconfined and unconsolidated aquifer generally mimic topography

and that groundwater, in general, flows from areas of high hydraulic head (elevation) to areas of low hydraulic head, the groundwater in the unconsolidated aquifer adjacent to the Yakima River is expected to discharge in a southeasterly direction sub-parallel to the Yakima River. As a result, the natural discharge area for groundwater, now accessed by the subject wells, would be expected to occur slightly downstream of the hatchery facility.

Recharge to the unconsolidated sedimentary aquifer, occurring adjacent to the Yakima River, is from precipitation, upgradient surface water runoff, canal seepage, irrigation return flows, and surface water exchange with the Yakima River when the river elevation is above that of the groundwater. Discharge from the unconsolidated sedimentary aquifer, occurring adjacent to the Yakima River, is to the Yakima River when the groundwater elevation is higher than the elevation of the river, to wells, and possibly to underlying consolidated units.

Impairment Considerations

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection. A water right application may not be approved if it would:

- Interrupt or interfere with the availability of water to an adequately constructed groundwater withdrawal facility of an existing right. An adequately constructed groundwater withdrawal facility is one that (a) is constructed in compliance with well construction requirements and (b) fully penetrates the saturated zone of an aquifer or withdraws water from a reasonable and feasible pumping lift.
- Interrupt or interfere with the availability of water at the authorized point of diversion of a surface water right. A surface water right conditioned with instream flows may be impaired if a proposed use or change would cause the flow of the stream to fall to or below the instream flow more frequently or for a longer duration than was previously the case.
- Interrupt or interfere with the flow of water allocated by rule, water rights, or court decree to instream flows.
- Degrade the water quality of the source to the point that the water is unsuitable for beneficial use by existing users (e.g., via sea water intrusion).

No impairment to other rights is likely to occur as a result of this authorization. The following is taken from the Ecology staff Hydrogeologist's technical memorandum:

The findings and observations noted above support a conclusion that the shallow groundwater which the subject wells access discharges downstream of the fish rearing and acclimation facilities' discharge outlet when the hydraulic head in the aquifer is above that of the Yakima River. If water is pumped from the wells, circulated through the fish rearing and acclimation facility, and discharged above the natural groundwater discharge location, the water use is not expected to negatively impact the flows of the Yakima River, and can be considered a non-consumptive use. The analytical modeling using the Theis equation indicates that any drawdown which may occur as a result of the permitting action is not expected to interfere with the ability of nearby well owners to fully utilize their well(s). In addition, the facility has operated for a number of years under temporary authorizations with no reported impairment incidents.

Water Availability

For water to be available for appropriation, it must be both physically and legally available.

Physical availability

For water to be physically available for appropriation there must be ground or surface water present in quantities and quality and on a sufficiently frequent basis to provide a reasonably reliable source for the requested beneficial use or uses. In addition, the following factors are considered:

- Volume of water represented by senior water rights, including federal or tribal reserved rights or claims;
- Water right claims registered under Chapter 90.14 RCW;
- Ground water uses established in accordance with Chapter 90.44 RCW, including those that are exempt from the requirement to obtain a permit; and
- Potential riparian water rights, including non-diversionary stock water.
- Lack of data indicating water usage can also be a consideration in determining water availability, if the department cannot ascertain the extent to which existing rights are consistently utilized and cannot affirmatively find that water is available for further appropriation.

The use of water is and has been occurring and there is ample evidence that water is available.

Legal availability

To determine whether water to be legally available for appropriation, the following factors are considered:

- Regional water management plans – which may specifically close certain water bodies to further appropriation.
- Existing rights – which may already appropriate physically available water.
- Fisheries and other instream uses (e.g., recreation and navigation). Instream needs, including instream and base flows set by regulation. Water is not available for out of stream uses where further reducing the flow level of surface water would be detrimental to existing fishery resources.
- The Department may deny an application for a new appropriation in a drainage where adjudicated rights exceed the average low flow supply, even if the prior rights are not presently being exercised. Water would not become available for appropriation until existing rights are relinquished for non-use by state proceedings.

The use of water under this authorization will result in substantial environmental benefits. There is no reason to believe that water is not legally available.

Beneficial Use

The proposed use of water for fish propagation is defined in statute as a beneficial use (RCW 90.54.020(1)).

Public Interest Considerations

Use of water as proposed will not be detrimental to the public interest. Water use is non-consumptive and the purpose of fish propagation provides for increased populations of anadromous fish, to assist in meeting restoration goals within the Yakima River Basin.

Consideration of Protests and Comments

No protests were filed against this application.

Conclusions

In conclusion, it appears that water is available for a beneficial use and that no impairment should be expected to other users, nor will the proposal be detrimental to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved and a permit be issued in the amounts and within the limitations listed below and subject to the provisions listed above

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

400 gpm

0 acre-feet per year (additive)

645 acre-feet per year (non-additive)

For the purpose of fish propagation and acclimation

Points of Withdrawal:

As described on Page 1 of this Report of Examination.

Place of Use:

As described on Page 1 of this Report of Examination.

Trevor Hutton, Report Writer

Date

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